6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 54

[WC Docket No. 13-184; DA 14-308]

Wireline Competition Bureau Seeks Focused Comment on E-Rate Modernization

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Wireline Competition Bureau seeks focused comment on three issues raised in the <u>E-rate Modernization NPRM</u> that merit further inquiry as the Commission moves towards the goal of meeting schools' and libraries' broadband connectivity needs. The <u>E-rate Modernization NPRM</u> sought broad comment on modernizing the E-rate program and proposed three goals for the program: ensuring that schools and libraries have affordable access to 21st Century broadband that supports digital learning; maximizing the cost-effectiveness of E-rate funds; and streamlining the administration of the program.

DATES: Comments are due on or before April 7, 2014 and reply comments are due on or before April 21, 2014.

ADDRESSES: Interested parties may file comments on or before April 7, 2014 and reply comments on or before April 21, 2014. All pleadings are to reference WC Docket No. 13-184. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies, by any of the following methods:

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.

People with Disabilities: To request materials in accessible formats for people with disabilities
 (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the
 Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (tty).

For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Regina Brown at (202) 418-0792 or James Bachtell at (202) 4182694, Telecommunications Access Policy Division, Wireline Competition Bureau or TTY (202) 418-0484.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's document in WC Docket No. 13-184; DA 14-308, released March 6, 2014. The full text of this document is available for inspection during regular business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington DC 20554. This document may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street SW., Room CY-B402, Washington, DC 20554, telephone 202–488–5300, facsimile 202–488–5563, or via email at FCC@BCPIWEB.com. It is also available via the Internet in the Commission's Electronic Document System (EDOCS) at http://www.fcc.gov/documents under WC Docket No. 13–184.

SYNOPSIS

1. The Wireline Competition Bureau (Bureau) seeks focused comment on three issues raised in the E-rate Modernization NPRM, 78 FR 51597, August 20, 2013, that merit further inquiry as the Commission moves towards modernizing the E-rate program to meet schools' and libraries' broadband connectivity needs. The E-rate Modernization NPRM sought broad comment on and proposed three goals for the program: (1) ensuring that schools and libraries have affordable access to 21st Century broadband that supports digital learning; (2) maximizing the cost-effectiveness of E-rate funds; and (3) streamlining the administration of the program. The Commission has received more than 1,500 comments and ex parte filings in response to the E-rate Modernization NPRM including numerous

comments from individual educators and school administrators; school districts and consortia; librarians and library systems; E-rate vendors and educational content providers; and other interested public and private organizations.

- 2. The record in this proceeding demonstrates overwhelming agreement among stakeholders that the E-rate program has been a crucial part of helping our nation's schools and libraries connect to the Internet. The record also shows a strong commitment to ensuring that the E-rate program quickly evolve to meet the ever-growing need for high-capacity broadband so our students and communities have access to 21st Century educational tools. The record is replete with support and suggestions for how to meet the goals for the E-rate program proposed in the E-rate Modernization NPRM.
- 3. Based on the extensive input the Commission has received, it appears that meeting the Commission's proposed goals for the E-rate program will require that, in the near term, the program focus on providing the support necessary to ensure schools and libraries can afford high-speed connectivity to and within schools and libraries, even as the Commission develops a long-term approach that allows applicants to scale up capacity while driving down costs. More specifically, the record underscores the importance of providing consistent and broadly available support for the equipment and services needed to enable high-capacity wireless broadband within schools and libraries; greater support, at least in the short term, for last-mile deployments needed to connect schools and libraries that do not currently have access to high-speed connections; a support methodology that allows applicants to capture the long-term cost-efficiencies associated with access to scalable, high-speed connections; less support for voice services, as the cost of voice services transition in the long run to the marginal cost of packet-based voice services provided over high-capacity broadband connections; incentives for making cost-effective purchasing decisions, including incentives and opportunities for schools and libraries to benefit from economies of scale in purchasing supported services; and as much administrative simplicity as possible, while protecting against waste, fraud and abuse.
- 4. In light of these themes that emerge from the record, as the Commission seeks to modernize the E-rate program, there are three issues raised in the E-rate Modernization NPRM that merit

further focused inquiry at this time: (1) how best to focus E-rate funds on high-capacity broadband, especially high-speed Wi-Fi and internal connections; (2) whether and how the Commission should begin to phase down or phase out support for traditional voice services in order to focus more funding on broadband; and (3) whether there are demonstration projects or experiments that the Commission should authorize as part of the E-rate program that would help the Commission test new, innovative ways to maximize cost-effective purchasing in the E-rate program. We seek further comment on how the issues below relate to the goals for the E-rate program that the Commission proposed in the E-rate Modernization NPRM and how they comport with relevant statutory requirements.

5. At the same time, the Commission continues to evaluate all of the input received in response to the E-rate Modernization NPRM. The issues we raise in this document do not define the full universe of possible changes the Commission could make in an order modernizing the E-rate program.

I. FOCUSED FUNDING FOR HIGH-CAPACITY BROADBAND

- 6. Commenters to this proceeding have made clear the importance of focusing E-rate support on high-speed connectivity to and within schools and libraries. As educational technology has improved in recent years, equipment and cabling used to deploy the interior pieces of broadband networks have become increasingly important, yet the E-rate program has provided less support and funded fewer applicants seeking support for such internal connections. Numerous commenters have identified support for internal connections as one of the program areas where modernization is most urgent and most important. Accordingly, in this section we ask about methods to improve this funding going forward. We also take this opportunity to ask about improvements to the existing priority one funding system for last-mile deployments for high-capacity broadband.
- 7. In seeking further comment on how best to focus E-rate funding on high-capacity broadband, we note that an initial review by Commission staff has found that the Commission can free up an additional \$2 billion over the next two years to help support broadband networks in our nation's schools and libraries, offering an opportunity to assess better ways to prioritize and distribute program funding at support levels higher than the current program cap. We seek comment on how best to use such

additional funds to support the Commission's efforts to provide high-capacity broadband within and to schools and libraries, as described in more detail below.

A. Broadband Deployment within Schools and Libraries

- 8. Stakeholders in this proceeding contend that the deployment of equipment inside school and library facilities is as essential to comprehensive broadband service at a given location as the high-speed connectivity to that facility. For example, Wi-Fi has transformed computing and education, creating the possibility of one-to-one learning in classrooms and libraries, and freeing desks and work stations from wired connections. A survey of school district leaders conducted by the Consortium for School Networking (CoSN) and Market Data Retrieval in 2013, however, showed that 57 percent of district leaders do not believe that their schools' wireless networks have the capacity to handle a one-to-one student-to-device deployment.
- 9. Internal connections essential to extend broadband throughout schools and libraries are currently eligible for support in the E-rate program as priority two services. However, some commenters have expressed concern because, in most funding years, there have only been sufficient funds to provide priority two support to schools and libraries in the highest bands of the discount matrix. Commenters generally agree that the rule that the Commission adopted limiting any school or library to two years of priority two support in every five year period (the two-in-five rule) does not appear to have achieved its intended goal of substantially spreading the available funds. Moreover, as demand for priority one funding continues to grow, the ability to provide any priority two support is an increasing challenge.
- 10. Therefore, to address the need for funding for the services and equipment necessary to ensure high-capacity broadband within schools and libraries, we seek comment on whether the Commission should change the current priority two funding category (including no longer supporting legacy services that are currently eligible for priority two funding), by allocating annually a set amount of E-rate funds to provide schools and libraries with funding for LANs and Wi-Fi networks, which are essential to ensuring high-capacity broadband reaches students and library patrons.

1. Scope of Services to Be Funded

- 11. Under this approach, only equipment and supporting software that is essential to getting high-capacity broadband from the building's front door to the computer, tablet, or other learning devices in schools and libraries would be eligible for internal connection support. We seek comment on what equipment is essential for such purposes. Some commenters have suggested that such equipment includes internal wiring, switches and routers, wireless access points, and the software supporting these components. We seek comment on whether these are the right categories of equipment and software to fund for this purpose.
- 12. Other commenters have suggested other technology that improves the efficiency of the broadband networks and should therefore also receive E-rate support. For example, several commenters have argued that E-rate should support caching through content servers because caching can allow schools to reduce their broadband demand by as much as half. Another commenter noted that slow firewall processing, outdated content filtering, and other similar internal network problems create significant speed bottlenecks on school and library networks. We now seek further focused comment on what services, software, or equipment are necessary to enable high quality, high-capacity networks inside schools and libraries, and whether such services, software and equipment should qualify for support?

2. Access to Funding

13. The Commission has acknowledged that under the current system only a small percentage of E-rate recipients receive the bulk of the internal connection funding. We seek comment on ways to provide more widespread access to funding for internal connections in order to enable schools and libraries nationwide to take advantage of high-capacity broadband to their buildings with robust internal networks. We seek particular comment on three potential ways to prioritize applications for deployment costs in the event that the demand for internal connection funds exceeds availability.

a. Five-Year Upgrade Cycle

14. Consistent with the method used to prioritize priority two funding today, the Commission

could prioritize funding by discount level, with rotating eligibility to provide as many schools and libraries as possible access to funding over a five-year upgrade cycle. Information in the record demonstrates that basic Wi-Fi and LAN equipment has a useable lifespan of five to seven years. Given this information, we seek comment on limiting an applicant's ability to receive internal connections funding to once every five years while retaining the existing prioritization method.

- 15. If the Commission were to adopt a one-in-five rule to replace the current two-in-five rule, how much funding would be needed to ensure that funds were available to meet the needs of all eligible schools and libraries? Would the Commission need to front-load support for eligible internal connections in the first funding years to meet the existing needs of schools and libraries? Is five years the right amount of time for such a funding cycle? If the Commission were to adopt this approach, should the one-in-five limitation apply at the level of applicants or, as it does today, at the level of individual school and library buildings?
- 16. If available funding is insufficient to fund all applicants at a particular discount level in a given funding year, how should the Commission decide which applicants to fund? Should it for example, prioritize funding for applicants within a discount level by giving preference to the applicants with the highest percentage of students receiving free and reduced school lunches?

b. Rotating Eligibility

17. Alternatively, we seek comment on limiting an applicant's ability to receive funding for internal connections that support high-capacity broadband to a single funding year until all other applicants have received support or declined the opportunity to seek funding in at least one funding year, starting in funding year 2015. This approach is consistent with one proposed by the State E-rate Coordinators Alliance (SECA) and supported by other commenters. This approach would ensure that all applicants are able to receive funding over time, but once they receive funding, applicants could not be certain about when they might next be eligible for internal connections funding. We seek comment on this tradeoff. If the Commission were to adopt this approach, applicants could have an incentive to inflate their original requests in their first year of eligibility. What safeguards should we adopt to address this

problem?

- 18. If the Commission were to use available funds to front-load support for eligible internal connections in funding years 2015 and 2016, would this obviate some of the drawbacks to this approach? If so, how much support should the Commission provide in funding years 2015 and 2016, and how much should it provide annually after that to ensure all schools and libraries have robust internal connections? If the Commission were to adopt this approach, should the rotating eligibility limitation apply at the level of applicants or, as the two-in-five rule does today, at the level of individual schools and library buildings?
- 19. If the Commission were to adopt this rotating eligibility approach, how should it prioritize funding for internal connections? Should it continue to fund eligible applications at the highest discount level first? If funding is insufficient to fund all eligible applications at a particular discount level in a given funding year, should the Commission give preference to the applicants with the highest percentage of students receiving free and reduced school lunches?

c. Annual Allocation for Internal Connections

20. As a third option, we seek comment on adopting a funding method that would provide some support for internal connections that support high-capacity broadband to all eligible applicants in each funding year, as opposed to the cyclical funding methods discussed above. By making at least some funding available annually for each applicant, this approach would prevent a small number of applicants from disproportionately using available funding and give all schools and libraries an opportunity to upgrade at least some of their facilities each year. In the E-rate Modernization NPRM, the Commission sought comment on a similar allocation of funds that would apply for the entire E-rate program. Many commenters were supportive, but many others expressed concern that this funding approach would not fully capture the diversity of costs faced by applicants across the country. Are these concerns mitigated in the context of internal connections, and particularly LAN and Wi-Fi deployments? In particular, unlike the costs of broadband connectivity to schools, we expect that the prices of many parts of LAN and Wi-Fi deployments (e.g., switches, routers, and wireless access points) should vary little based on the

geographic location of schools and should generally scale proportionally with the size of the student body. We seek comment on these expectations.

21. More specifically, we seek comment on using the following simplified version of the formula proposed by Funds for Learning and a coalition of schools and school groups to set available funding levels for each applicant.

Allocation Formula

By identifying available funds and estimating the total pre-discount requests that could be supported with those funds, the Commission would arrive at an amount to be allocated to each applicant. Applicants would be entitled to receive funds, applying their usual discounts, towards the purchase of eligible internal connections up to the pre-discount allocation. Under this approach if, in order to ensure that small schools and libraries would receive sufficient funding, the Commission were to adopt a perapplicant or per-building minimum allocation as part of the formula, what should that minimum perbuilding or per-applicant support level be? If the Commission adopts such an approach for school applicants, how should it calculate the annual allocation for libraries?

22. In addition to ensuring that all applicants have the opportunity to receive at least some internal connection funding each year, adopting this annual allotment could have the benefit of providing applicants certainty about the amount of funding that would be available to them each year. We seek comment on this consideration. Would funding certainty over a multi-year period create new opportunities for up-front financing to cover equipment upgrades in a given year? We also seek comment on how to best utilize any remaining funding if some applicants request less than their allocated amount. Should such funding be made available to increase the allocation to other applicants in the same funding year? Should it be held over to subsequent funding years? Or should we adopt another approach? Finally, how should the Commission allow these funds to be spent by the applicants? Should district or

library systems be required to spend those funds at specific schools or libraries in certain proportions? Or should each applicant have the flexibility to spend the funds as it decides across its district or library system?

d. Other Methods to Prioritize Internal Connections Funding

23. Are there variations on the options described above or other methods the Commission should consider employing to prioritize funding for high-capacity internal connections? Should it, for example, prioritize projects by the number of students impacted per dollar of funding? Should the Commission prioritize consortia applications?

B. Broadband Deployment to Schools and Libraries

- 24. The record reflects that some schools and libraries do not have access to high-capacity broadband connections to their buildings, and commenters have suggested that the Commission undertake a targeted effort to help support deployment of high-capacity, scalable last-mile connections to eligible schools and libraries that do not currently have access to connections that meet the connectivity goals laid out in the E-rate Modernization NPRM.
- 25. As explained in the <u>E-rate Modernization NPRM</u>, the E-rate program currently offers support for broadband construction to schools and libraries. However, commenters have explained that even with the current levels of E-rate support, some schools and libraries cannot afford to pay their share of the cost of deploying last-mile high-capacity broadband.

1. Scope of Services to Be Funded

26. In light of the record demonstrating that the costs of one-time construction projects, even though already supported by the E-rate program, can be cost-prohibitive, we seek comment on whether the Commission should undertake a limited initiative, within the existing priority one system, to incent the deployment of high-capacity broadband connections to schools and libraries. We invite stakeholders to offer examples of projects for which they would seek funding if the Commission adopts such an approach. Exactly what services should the Commission fund as part of this deployment effort? For

instance, what types of fiber deployment or other high-capacity, scalable broadband technologies that meet the connectivity goals in the <u>E-rate Modernization NPRM</u>, should be eligible for funding?

- 27. In the E-rate Modernization NPRM, the Commission sought comment on how to ensure that broadband deployment to schools and libraries is done in a way that minimizes the recurring costs for both applicants and the E-rate program once deployment is complete. While the record indicates that new broadband deployments, once paid for, can dramatically lower recurring costs over time, it also reveals situations where monthly charges have remained high even after new deployments are complete and costs have been fully recovered. If the Commission does decide to provide some additional support for the capital costs associated with high-capacity deployment, how can it best ensure that the recurring costs associated with providing broadband over new connections is affordable for the applicants on a going-forward basis?
- 28. Should the Commission change the program's funding methodology as part of this deployment initiative? Would it be sufficient for the Commission to simply raise the discount rate for all applicants seeking deployment support by 10 percent or some other percentage? Or would it be better for the Commission to adopt a flat discount rate for all applicants? If so, what should this flat rate be? Are there some schools and libraries on Tribal lands, or in remote rural areas that cannot afford high-capacity broadband build-out without full support? Should the Commission consider full support for all applicants seeking support for broadband connectivity? While such an approach could encourage applicants to participate in the program and greatly increase broadband deployment to schools and libraries, how would the Commission ensure that applicants do not enter into agreements requiring excessive funding for broadband deployment?
- 29. Some commenters have explained that vendors often limit up-front deployment costs and instead collect the costs over several years as part of the cost of recurring services. Are there instances in which the Commission should authorize increased support for the recurring costs of broadband services over a period of time instead of, or in addition to, increased support for up-front costs, to the extent those recurring costs reflect time-limited recovery for capital investment? If so, over how long a period of time

and under what circumstances?

2. Ensuring Equitable Distribution

- 30. We also seek comment on how best to distribute support among the applicants for high-speed connections to schools and libraries. In particular, if the Commission makes some additional deployment support available to eligible schools and libraries that do not already have access to high-speed scalable connections available at reasonable prices, how do we identify those schools and libraries? Should we rely on the broadband speed targets identified by the Commission in the E-rate Modernization NPRM and require applicants for this deployment funding to demonstrate their current Internet access service does not meet that metric? Should we consider future scalability of existing connections and/or available pricing when identifying eligible schools and libraries? Are there other methods the Commission should consider to determine the best projects to fund?
- 31. We also seek comment on ways to prioritize applications for deployment costs in the event that the demand for such funds exceeds availability. In the current E-rate program, when available funds do not meet demand, the applicants with the greatest economic need (i.e., those with the highest percentage of students that qualify for free and reduced school lunches) are funded first at the 90 percent discount rate, then funding goes to those applicants eligible for 89 percent discount levels, and so on, until the available funds are exhausted. Eligible libraries receive the discount rate of the school district in which they are located. Should the Commission adopt a similar mechanism for distributing funding for deployment of high-capacity broadband to eligible schools and libraries?
- 32. As an alternative, we seek comment on adopting one or more objective impact and/or efficiency metrics to prioritize applications. For example, school applicants could be required to calculate the total number of students currently in buildings without infrastructure capable of meeting Commission-adopted speed goals. Those schools would then be upgraded to scalable, high-speed connections with E-rate support and applications could be scored based on the total cost per-student served. Should the Commission also consider prioritizing upgrades that do not increase the speed available to applicants, but dramatically reduce recurring costs following new investment (for example, if applicants sought to

upgrade from Internet access using two T3s to a single 100 Mbps metro Ethernet circuit, or to purchase WAN upgrades that allowed them to buy Internet access at a lower-priced point-of-presence)? If so, how much weight should be given to particular levels of reductions in recurring costs? If the Commission adopted multiple objective impact and/or efficiency metrics, how should they be evaluated together? For example, how should applications that reduce recurring costs be scored against those that include speed upgrades? Are there other methods the Commission could employ to prioritize funding for up-front deployment costs in the event demand exceeds availability?

33. Within the existing priority one system, applicants can receive E-rate support for some installation and special construction charges, but the cost of large projects must be prorated over three years or more. This limit may disproportionately harm rural and other applicants that face the largest deployment costs, especially because there are no exceptions for rural deployments or other unique circumstances. Would adopting one of the prioritization approaches above for deployment funding allow the Commission to relax this limit?

C. Encouraging Cost-Effective Purchasing

- 34. As the Commission considers how to focus E-rate funding on high-capacity connections to and within schools and libraries, are there additional steps the Commission can take to help ensure efficient use of E-rate funds spent on broadband projects? Below we seek comment on three possible ways to encourage cost-effective purchasing. We also invite commenters to offer other methods to encourage cost-effective E-rate purchasing.
- 35. Consortium purchasing and bulk buying. In the E-rate Modernization NPRM, the Commission sought comment on encouraging consortia and other bulk purchasing programs. If the Commission moves to support a more limited set of equipment and services for high-capacity internal connections, is there an opportunity for E-rate applicants to drive down prices of the products necessary for Wi-Fi and LAN connectivity through consortium purchasing or other forms of bulk buying? If so, what steps can the Commission take to encourage cost-effective consortia or other bulk purchasing of such products? Likewise, if the Commission focuses some additional funding on high-capacity

broadband deployment to schools and libraries currently unserved by broadband services, should the Commission encourage the formation of consortia to encourage providers to offer affordable services to groups of schools and/or libraries? If so, what steps can the Commission take to encourage the formation of consortia that have the tools to engage in cost-effective purchasing? Are there steps the Commission can take to encourage currently successful consortia to add members, particularly eligible entities that currently lack the kind of purchasing power enjoyed by consortia? How can the Commission help ensure that the formation of such consortia does not unfairly disadvantage smaller providers that may be efficient local providers of high-capacity services?

- 36. Technology planning. Another possible approach to ensuring cost-effective purchasing of broadband services is to require technology planning. The Commission eliminated technology plan requirements for E-rate applicants seeking only support for priority one services in order to simplify the application process for schools and libraries. The E-rate Modernization NPRM sought comment on whether there were lessons learned from current and previous technology plan requirements and whether these requirements should be re-instituted. We now ask more specifically whether the Commission should require applicants that are seeking E-rate support for upgrading high-capacity connections to school buildings or libraries to demonstrate that they have a plan and the capacity to use those services within their buildings.
- 37. <u>Data collection and transparency.</u> In the <u>E-rate Modernization NPRM</u>, the Commission sought comment on how best to collect data on the speed and quality of school and library connections. The Commission also sought comment on what data to collect to support the proposed goal of maximizing cost-effective purchasing. As the Commission considers how best to provide support for broadband deployment within and to schools and libraries, we renew our request for comment on those data issues and on whether price transparency for E-rate supported services will help drive down those prices.

D. Streamlining the Administrative Process

38. As the Commission considers how best to support high-capacity broadband connections

to and within schools and libraries, consistent with the Commission's proposed third goal of streamlining the administration of the E-rate program, we seek additional comment on how best to minimize the administrative burdens and overhead associated with applying for and receiving such support. Are there for example, simple changes the Commission can make to the E-rate information collections that will ease the administrative burdens on E-rate applicants and vendors that take advantage of a modernized E-rate program?

39. Are there changes to the invoicing deadlines the Commission should adopt to take into account a focus on broadband deployment? Under the current program, all recurring services must be completed during the funding year and invoices must be submitted no later than 120 days after the last day to receive service or 120 days after the FCC Form 486 Notification Letter date, whichever is later. Non-recurring charges for broadband projects, such as build-outs and special construction, must be completed by September 30 following the close of the funding year, with some exceptions. Because of the possibility that complex projects could take additional time beyond the funding year, should new deployment be given 18 months to be completed and invoiced from the date the funds are committed? Should complex internal connections projects be given 18 months to be completed and invoiced from the date the funds are committed? Could invoicing deadlines be synchronized with other federal funding programs to reduce complexity for applicants? Should applicants be allowed any extension of their project deadlines? If so, under what circumstances? Currently, special construction or build-outs can commence six months before the start of the funding year. Should the Commission give applicants additional time before the funding year to begin special construction to schools and libraries, or to begin internal infrastructure projects?

II. REDUCED SUPPORT FOR VOICE SERVICES

40. In the <u>E-rate Modernization NPRM</u>, the Commission proposed to refocus the E-rate program on supporting high-capacity broadband connectivity to and within schools and libraries and recognized that it needed to confront the prospect of eliminating or reducing support for voice and other legacy services that do not advance the deployment of broadband. As schools and libraries increasingly

transition to voice over Internet protocol (VoIP) services, we expect the price they pay for voice services to decrease. While many commenters expressed support for a transition from funding voice telephony services, many such commenters also stressed the importance of phasing out support for voice services over a number of years, with several specifically endorsing a three- to five-year phase-out period. Below we seek comment on several specific ways for the Commission to transition away from support for voice services, and we invite commenters to offer other suggestions for how best to redirect E-rate support from voice to broadband services.

A. Reduced E-rate Support for Voice Services

- 41. One way for the Commission to phase out support for voice services would be to gradually reduce the discount rate applicants receive for voice services. For example, the Commission could phase out support for voice services by 15 percentage points per year, beginning in funding year 2015, and continue to reduce support for such services by the same amount each year until funding for voice services is fully phased out in funding year 2020. We seek comment on this approach, as well as any other options for reducing E-rate spending on voice services. A gradual approach to reducing support for voice services should give schools and libraries time and the incentive to find lower priced solutions, and could also provide the Commission a period to evaluate whether it should adjust the phase out schedule. Although such an approach will result in some applicants receiving no support for voice services prior to funding year 2020, the most economically disadvantaged applicants i.e. those that are currently eligible for a 90 percent discount rate would be eligible for a 75 percent discount on voice telephony in funding year 2015, a 60 percent discount in funding year 2016, a 45 percent discount in 2017, a 30 percent discount in funding year 2018, and a 15 percent discount in funding year 2019.
- 42. We expect that the diminished availability of E-rate funding for voice services will be ameliorated by the fact that many applicants have transitioned or will transition to VoIP, which is generally considered to be more cost-efficient than traditional voice services. Although some commenters have suggested that the initial costs, including the cost of new handsets, to transition to VoIP is cost prohibitive for them, others indicate that they are embracing this trend. Our approach also takes

into consideration that the growth of competitive options for voice services, such as VoIP, should drive down costs for voice services.

- 43. If the Commission elects to phase out support for voice beginning in funding year 2015, will schools and libraries have adequate time and resources to make needed adjustments? Commenters should consider that as the E-rate program increasingly supports high-capacity broadband, applicants may be eligible for increased levels of support for broadband services to and within schools and libraries. Will increased funding for these other types of services assist schools and libraries adjusting to decreasing levels of E-rate support for voice telephony services? Will increased support for high-capacity broadband networks to and within schools and libraries put applicants in a better position to transition to VoIP, and would E-rate still be supporting voice services, albeit indirectly, by supporting the infrastructure and services over which VoIP will ride? Would it be appropriate, therefore, to phase out support for voice services only once a school or library has gained access to high-capacity broadband? If so, we seek comment on whether we should adopt different voice phase-out dates on a case-by-case basis for individual schools or libraries, such as within one year after they have broadband that meets the goals for high-capacity broadband established in this proceeding.
- 44. We also seek comment on whether the entries for telephone services, telephone components, and interconnected VoIP in the Eligible Services List (ESL) include all of the types of voice services and components that should be covered by the five year phase out. Are there any services in these entries that should be excluded from the phase out? Are there other types of telephone services that are not specifically listed in the current ESL that should be subject to the phase out? Commenters should provide details on the specific voice services for which support should be phased out and provide detailed reasons for why certain services should be included or excluded from the list of targeted voice services.

B. Alternatives

45. The Commission may also decide to eliminate voice more quickly or to modify in some other way the current approach to supporting voice services. Therefore, we also seek comment on a number of alternative ways to approach funding for voice services, and we invite comment on the

approaches we identify below, as well as variations on or alternatives to any such options.

- 46. <u>Elimination of voice support</u>. As an alternative to a phase down of voice support, should the Commission consider eliminating all support for voice services starting in funding year 2015? Such an approach would more quickly accomplish the Commission's goal of transitioning the E-rate program to supporting high-capacity broadband, but would also result in a more stark loss of support for applicants. Would it be more appropriate to provide additional time for applicants to make necessary budgetary changes by eliminating all support for voice services, but in a later funding year?
- 47. Lower priority for voice services. In the alternative, we also seek comment on retaining support for voice services under a lower priority. For example, SECA recommends that the Commission establish a new priority category for particular services, including voice services, to be funded at a flat 50 percent discount and that all applicants have equal access to the services in this category. Would it be more manageable for applicants to adjust to a larger reduction in funding the first year we implement a discount reduction for voice services because they know they will continue to receive such funding in future years? If we were to take such an approach, would it encourage applicants to move to more cost-effective solutions or would we need to take additional steps to encourage such transitions?
- 48. <u>Benchmark for VoIP support</u>. As voice communications technologies migrate from traditional TDM to IP should the Commission encourage this transition for schools and libraries using the E-rate program? Some commenters suggested that rather than phasing out E-rate support for all voice services, the Commission should continue to provide support for VoIP solutions. A possible middle ground would be for the Commission to identify inexpensive VoIP solutions for schools and libraries and use such services as a benchmark for how much support the E-rate program will provide for voice services.
- 49. If the Commission establishes a benchmark support amount, should the benchmark be on a per-user basis or some other basis? If the Commission establishes a per-user benchmark, how would applicants establish the number of users they have that provide the basis for the amount of their requested support? If the Commission establishes a benchmark support amount, should the E-rate program use this

benchmark to support all voice services, regardless of the technology used? Or should the Commission use the benchmark derived support amount only to fund VoIP service and phase down support for all other voice services? Does the transition to VoIP services offer applicants an opportunity to use consortium purchasing or other forms of bulk buying to drive down the cost of services while ensuring service quality? If so, what steps can the Commission take to encourage such purchasing?

C. Other Issues Related to Voice Services

- 50. As the Commission considers how to treat voice services as part of a modernized E-rate program, we seek comment on several specific issues relating to the funding of voice services and invite commenters to raise other issues.
- 51. <u>Internal connections.</u> We also seek comment on whether the Commission should end support for internal connections used for the delivery of voice services which are currently supported as priority two eligible services. Will discontinuing support for the internal connections used to deliver voice discourage applicants that had been considering a transition to VoIP? If VoIP is the most cost-effective option for voice services, we seek comment on whether the E-rate program should offer some short term incentive to applicants to transition to VoIP. Some commenters have already explained in this proceeding that they are reluctant to switch to VoIP for a variety of reasons. Would it be a sufficient incentive for applicants to transition to VoIP if the E-rate program provided an additional, one-time discount, such as 10 percent to 20 percent, to applicants in order to help defray the up-front costs necessary for the first year of a transition to VoIP?
- 52. Rural areas or areas that lack access to broadband. If the Commission decides to decrease support for voice services, some commenters have suggested that it continue to provide support for traditional voice services for those schools and libraries in remote rural areas, on Tribal lands, or elsewhere that lack access to high-capacity broadband and therefore will find it more challenging to adopt affordable VoIP options. For example, Alaska EED and Alaska State Library ask the Commission to consider extending the eligibility of voice services for locations that rely on satellite Internet service. We seek further comment on such an approach, and specific comment on how, if the Commission adopts such

an exemption, it should determine which applicants should qualify? Would it be sufficient, for example, to simply require applicants to certify that there are no alternatives to POTS service in their geographic location?

53. Above we ask whether we should adopt different voice phase-out dates for individual schools or libraries, such as within one year after they have the high-capacity broadband that meets the goals established in this proceeding. Should we adopt this approach for rural schools and libraries, and require that for rural entities to qualify for an exemption from phase-out, they do not have the high-capacity broadband meeting the goals laid out in this proceeding? Should waivers or exemptions for those applicants in areas where VoIP is not available also be available for those applicants that can upgrade to VoIP but choose not to for financial or other reasons? Are there other types of schools and libraries that have unique needs meriting continued E-rate support for voice services at current levels? How should we define the areas or circumstances where support for voice service would continue to be supported under an alternative like this?

D. Easing Administrative Burdens

54. We seek comment on how best to reduce the administrative burden on E-rate applicants, regardless of which approach to supporting voice services the Commission takes in modernizing the E-rate program. If, for example, the Commission decides to phase down or phase out support for voice services, will calculating the correct amount of support due to applicants be administratively challenging? If so, what can the Commission do to ease the administrative burdens? Commenters have generally supported easing the burdens for multi-year contracts for recurring services, is that something that would be particularly useful in this context? Likewise, if the Commission moves to supporting voice using a per-user cost for VoIP services as a benchmark, are there administrative challenges the Commission should take into account, and are there things the Commission can do to ease the administrative burden of such an approach on schools and libraries?

III. DEMONSTRATION PROJECTS

- 55. In the E-rate Modernization NPRM, the Commission sought comment on innovative approaches to encouraging efficiency in the E-rate program. Many commenters offered examples for how new approaches to planning and procuring services might be either (or both) more cost effective or more administratively efficient. At the same time, many commenters argued that local needs vary and local decision making has been one of the hallmarks of the E-rate program. As the Commission considers how best to meet the high-capacity connectivity needs of schools and libraries cost effectively, commenters supported the use of E-rate funds for projects of broad relevance to help identify and accelerate the development of best practices for achieving cost savings and innovation within E-rate.
- 56. We therefore now seek further comment on providing limited funding for well-defined, time-limited demonstration projects aimed at identifying and testing different approaches to meeting schools' and libraries' connectivity needs. Like the recently adopted <u>Technology Transitions Order</u> that solicited a broad set of experiments in order to develop facts and data, such projects would be set up as proof of concept experiments on innovative approaches to maximizing cost-efficient use of E-rate funding. These projects, although experimental, would provide needed services and equipment to E-rate eligible participants. We seek comment on funding a number of different types of demonstration projects based on Commission and stakeholder proposals. We also invite suggestions of other types of projects the Commission should conduct, the amount that should spend on any individual project, and the total budget for such projects.
- 57. As one example, the Commission sought comment on whether to allow experimentation in bulk purchasing of E-rate eligible services and equipment. We received a mixed reaction in response to the E-rate Modernization NPRM on whether the Commission should create a formal bulk buying program. While commenters expressed concern about the potential rigidity of requiring applicants to use such a program, they supported promoting the use of statewide or consortia bulk purchasing. We therefore seek further comment and proposals on how to conduct one or more initial experiments with bulk purchasing. A structured bulk buying demonstration project could test the cost-effectiveness and

flexibility of such a program using just a small number of services or products, and would have the benefit of providing applicants with products and services they need as part of their broadband networks. For example, stakeholders could propose a project to gather data on bulk purchasing by a state, consortia, or regional research and education network for certain internal connection components, commercial internet access, or a VoIP solution that would replace traditional voice service. We seek comment on these types of projects and how to foster innovative and scalable practices.

- 58. A demonstration project could also provide an opportunity to gather information and test proposals for implementation of a technical assistance program. For example, a demonstration project could test the effectiveness of hiring technical assistance experts to assist in network design or technical planning in a small number of districts, schools, and/or libraries whose costs fall outside a standard range for E-rate applicants. Another could test the use of consultants who are experts on connectivity costs and are un-affiliated with broadband providers.
- Association, for example, suggested a pilot program aimed at temporarily increasing the discount level for targeted libraries, prioritizing based on public-private partnerships, and providing technical assistance in order to "catalyze innovation" in advancing library services. If we were to fund such a project, how much funding should we provide and over what period of time? What sort of support could we expect the private sector to bring to such a project? Are there particular needs of libraries that we should focus on? What types of technical assistance would be particularly valuable, and to what end? What data should the Commission collect, as part of such a pilot program, and how should we use that data to measure progress towards success? Are there ways in which libraries' connectivity needs differ from those of schools? Are there other types of demonstration projects aimed at addressing the unique needs of libraries that the Commission should fund? With respect to all proposed demonstration projects, we request commenters be as specific as possible about the goals, the amount of funding, the process for selecting participants, the data to be collected and the timeline for any projects they propose or support.
 - 60. Commenters also contributed other ideas, such as a pilot program to link last-mile

infrastructure to BTOP funded networks, experiments on the use of consortia efforts, or projects that target rural areas. Another proposed a project to implement bulk purchasing of a platform to facilitate affordable access to advanced information services. We seek comment on these proposals and how such projects could be structured to gather data and evaluate success. These examples are not meant to be exhaustive. We welcome further ideas from stakeholders on the types of demonstration projects that can help identify cost efficiencies and drive down the cost of E-rate supported services. Are there other approaches used by enterprise customers to drive down their broadband costs that the Commission should experiment with in the E-rate program?

- 61. We seek specific comment on the process for selecting such proposals. In determining projects, should the Commission focus on experiments that examine cost impacts or consider other types of criteria, such as innovativeness? How should the Commission prioritize project funding? Should the length of any given demonstration project be limited to a single year? Should they be tied to specific E-rate funding years? Should the Commission select different kinds of projects to evaluate the different models' effects on driving down costs of E-rate eligible services? These projects should be designed to help the Commission gather data needed to inform decision-making and make future reforms. Therefore, we seek detailed comment on the data goals and how to evaluate the projects during and after selection. We also seek further ideas on how to share information and empower applicants to replicate project successes across the country.
- 62. Numerous commenters have confirmed the importance of streamlining the administration of the E-rate program. Therefore, as we consider demonstration projects, we also invite experiments that find ways to reduce the administrative burden on E-rate applicants.

IV. PROCEDURAL MATTERS

A. Regulatory Flexibility Analysis

63. The <u>E-rate Modernization NPRM</u> included an Initial Regulatory Flexibility Analysis (IRFA) pursuant to 5 U.S.C. 603, exploring the potential impact on small entities of the Commission's

proposals. We invite parties to file comments on the IRFA in light of this additional document.

B. Paperwork Reduction Act Analysis

64. This document seeks comment on a potential new or revised information collection requirement. If the Commission adopts any new or revised information collection requirement, the Commission will publish a separate document in the <u>Federal Register</u> inviting the public to comment on the requirement, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3501-3520). In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

C. Ex Parte Presentations

65. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule § 1.1206(b). In proceedings governed by rule § 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that

proceeding, and must be filed in their native format (<u>e.g.</u>, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's <u>ex parte</u> rules.

D. Comment Filing Procedures

- 66. Comments and Replies. We invite comment on the issues and questions set forth in this document and IRFA contained herein. Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments on this document by April 7, 2014 and may file reply comments by April 21, 2014. All filings related to this document shall refer to WC Docket No. 13-184. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121, May 1, 1998.
 - Electronic Filers: Comments may be filed electronically using the Internet by accessing the
 ECFS: http://fjallfoss.fcc.gov/ecfs2/.
 - Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
 - Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority
 Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th
 Street, SW, Washington DC 20554.
- 67. People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).
- 68. In addition, one copy of each paper filing must be sent to each of the following: (1) the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC 20554; website: www.bcpiweb.com; phone: (800) 378-3160; (2) Lisa Hone, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 6-A326, Washington, DC 20554; e-mail: Lisa.Hone@fcc.gov; and (3) Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 5-A452, Washington, DC 20554; e-mail: Charles.Tyler@fcc.gov.
- 69. Filing and comments are also available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, DC 20554. Copies may also be purchased from the Commission's duplicating contractor, BCPI, 445 12th Street, SW, Room CY-B402, Washington, DC 20554. Customers may contact BCPI through its website: www.bcpi.com, by e-mail at fcc@bcpiweb.com, by telephone at (202) 488-5300 or (800) 378-3160 or by facsimile at (202) 488-5563.
- 70. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with § 1.49 and all other applicable sections of the Commission's rules. We direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. We also strongly encourage parties to track the organization set forth in this document in order to facilitate our internal review process.

71. For additional information on this proceeding, contact James Bachtell at (202) 418-2694 or Regina Brown at (202) 418-0792 in the Telecommunications Access Policy Division, Wireline Competition Bureau.

FEDERAL COMMUNICATIONS COMMISSION.

Trent B. Harkrader,
Associate Bureau Chief,
Wireline Competition Bureau.

[FR Doc. 2014-05433 Filed 03/10/2014 at 8:45 am; Publication Date: 03/11/2014]